

**REMARKS**

Attached hereto is a marked-up version of the changes made to the specification and/or claims by the current amendment. The attached page is captioned "**Version with marking to show changes made.**"

In response to the Notice to Comply mailed December 22, 2000, please find enclosed a paper and computer-readable copy of the Sequence Listing. To the best of the undersigned's knowledge, the printed equence Listing is identical to the Sequence Listing submitted in computer-readable form.

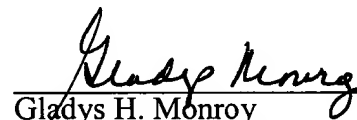
This paper is submitted to comply with the United States Patent Office rules governing gene sequences. No new matter is added.

In the unlikely event that fee transmittal letter is separated from this sequence listing and the U.S. Patent Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorize the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this sequence listing to our **Deposit Account No. 03-1952**. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,

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By:

  
Gladys H. Monroy  
Registration No. 32,430  
for  
Catherine M. Polizzi  
Registration No. 40,130

Morrison & Foerster LLP  
755 Page Mill Road  
Palo Alto, California 94304-1018  
Telephone: (650) 813-5651  
Facsimile: (650) 494-0792

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**In the Specification**

*Please substitute the following for the paragraph beginning on page 3, line 5 and ending on page 3, line 18*

The invention features substantially pure DNA (cDNA or genomic DNA) encoding a protease-activated receptor 3 (PAR3) from vertebrate tissues (SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO: 4 and SEQ ID NO: 5) and degenerate sequences thereof; substantially pure protease-activated receptor 3 polypeptides encoded thereby; as well as amino acid sequences substantially identical to the amino acid sequences SEQ ID NO:3, 24, 25, and 26 and SEQ ID NO:6, 27, and 28 from mouse and human, respectively. The invention further comprises fragments of the PAR3 receptor which are activated by thrombin. Such fragments may have the same amino acid sequence as SEQ ID NO[s]:3, 24, 25, and 26 and SEQ ID NO:6, 27, and 28 or be at least 80% identical to the amino acid sequences SEQ ID NO:3, 24, 25, and 26 and SEQ ID NO:6, 27, and 28.

*Please substitute the following for the paragraph beginning on page 4, line 11 and ending on page 4, line 18*

Fig. 1 is the complete nucleotide and amino acid sequences (SEQ ID NO:1 and SEQ ID NO:3, 24, 25, and 26, respectively) of the mouse protease-activated receptor 3 gene coding region cDNA. The deduced amino acid sequence of the receptor is provided below the nucleotide sequence and contains 369 amino acids. The deduced amino acid sequence begins at nucleotides 51-53 (ATG = Met) and ends at nucleotides 1158-1160 (TAG = stop).

*Please substitute the following for the paragraph beginning on page 4, line 21 and ending on page 4, line 28*

Fig. 3 is the nucleotide and deduced amino acid sequences (SEQ ID NO:4 and SEQ ID NO:6, 27, and 28, respectively) of the human protease-activated gene coding region cDNA. The deduced amino acid sequence is provided below the nucleotide sequence and contains 374 amino

acids. The coding region of the cDNA sequence begins at nucleotides 58-60 (ATG = Met) and ends at nucleotides 1180-1182 (TAG = stop).

*Please substitute the following for the paragraph beginning on page 4, line 31 and ending on page 5, line 5*

Fig. 5A shows the alignment of the deduced amino acid sequences (SEQ ID NO: 3, 6, 7, 8, 9, 24, 25, 26, 27 and 28) of the mouse PAR3, human PAR3, human PAR1, and human PAR2. To indicate homology, gaps (represented by blank spaces) have been introduced into the five sequences. Transmembrane domains are overlined (TM1-7). Fig. 5B shows the alignment of the hirudin-like portion of human PAR1, PAR2, and PAR3 amino acid sequences.

#### **In the Claims**

6. (AMENDED) The substantially pure protein of claim 5 having an amino acid sequence selected from the group consisting of the sequence shown in Fig. 1 (SEQ ID NO: 3, 24, 25, and 26) and the sequence shown in Fig. 2 (SEQ ID NO: 6, 27, and 28).

7. (AMENDED) A substantially pure polypeptide having an amino acid sequence which is at least 80% identical to an amino acid sequence selected from the group consisting of the sequence shown in Fig. 2 (SEQ ID NO: 3, 24, 25, and 26) and the sequence shown in Fig. 2 (SEQ ID NO: 6, 27, and 28), wherein

- a) said polypeptide is activated by thrombin; and
- b) said polypeptide mediates phosphoinositide hydrolysis in a cell expressing said polypeptide on its surface.